

CALIFORNIA TRAFFIC CONTROL DEVICES COMMITTEE (CTCDC) AGENDA (Revised)
September 3, 2015 Meeting (9:00 am to 2:00pm)

**Caltrans District 11
4050 Taylor Street
San Diego, CA 92110
Garcia Auditorium 1-125**

The Meeting is open, and public/local agencies are invited to attend. For further information regarding this meeting, please contact Chris Engelmann at (916) 653-1816, or at chris.engelmann@dot.ca.gov. Electronic copies of this meeting Agenda and minutes of the previous meetings are available at <http://www.dot.ca.gov/hq/traffops/engineering/ctcdc/index.htm>.

Organization Items

- 1. Introduction**
- 2. Approval of Minutes of the June 4, 2015 Meeting**
- 3. Membership**
 - a. Dan Gutierrez
 - b. Lt. Baland
 - c. David Fleisch
 - d. Vacancy for alternate for non-motorized representative

4. Public Comments

At this time, members of the public may comment on any item not appearing on the agenda. Matters presented under this item cannot be discussed or acted upon by the Committee at this time. For items appearing on the agenda, the public is invited to make comments at the time the item is considered by the Committee. Any person addressing the Committee will be limited to a maximum of five (5) minutes so that all interested parties have an opportunity to speak. When addressing the Committee, please state your name, address, and business or organization you are representing for the record.

5. Items under Experimentation

Agenda Items

6. Public Hearing

Prior to adopting rules and regulations prescribing uniform standards and specifications for all official traffic control devices placed pursuant to Section 21400 of the California Vehicle Code, the Department of Transportation is required to consult with local agencies and hold public hearings.

Consent Items (minor discussion with vote expected)

<u>Agenda Item</u>	<u>Description</u>	<u>Submitted by:</u>	<u>Lead</u>	<u>Page #s</u>
None				

Information Items (New items that may be voted on or brought back as an Action Item in a future meeting)

<u>Agenda Item</u>	<u>Description</u>	<u>Submitted by:</u>	<u>Lead</u>	<u>Page #s</u>
15-15	Proposal for striping a space for bicycle use at locations with right-turn-only lanes	Caltrans	Tong	7 - 12
15-16	Proposal to re-insert 3 sec minimum yellow change interval for protected left or right turns	Caltrans	Tong	13 - 14
15-17	Information on definition of intersections and unmarked crosswalks	Caltrans	Tong	15 - 17
15-18	Proposal for street names for bridges over paths and at path intersections	Walt Seifert	Jones	18 - 20
15-19	Information on use of red markers on off-ramps	Caltrans	Tong	21 - 22
15-20	Proposal to modify Section 2B.55 Photo Enforced Signs and Plaques	Caltrans	Tong	23 - 24
15-21	Proposal to remove International Symbol of Accessibility (ISA) from Fig. 3B-22(CA)	Caltrans	Tong	25 - 26
12-10	Request to use directional signage for Veteran Memorial Monuments	City of Murrieta	Tong	25 - 31

Action Items (Continuing discussion from prior meetings with vote expected)

<u>Agenda Item</u>	<u>Description</u>	<u>Submitted by:</u>	<u>Lead</u>	<u>Page #s</u>
None				

Tabled Items

<u>Agenda Item</u>	<u>Description</u>	<u>Submitted by:</u>	<u>Lead</u>	<u>Page #s</u>
15-11	Proposed Near-Term Revisions to Existing CA MUTCD Guidance on Bicycle Signals	Caltrans	-	-

7. Request for Experimentation

<u>Agenda Item</u>	<u>Description</u>	<u>Submitted by:</u>	<u>Lead</u>	<u>Page #s</u>
None				

8. Discussion Items

<u>Agenda Item</u>	<u>Description</u>	<u>Submitted by:</u>	<u>Lead</u>	<u>Page #s</u>
None				

9. Next Meeting

December 10, 2015

Caltrans Headquarters

1120 N Street

Sacramento, CA 95814

Caltrans Board Room

10. Adjourn

5. Items under Experimentation

Some reports are available at: <http://www.dot.ca.gov/hq/traffops/engineering/ctcdc/status.htm>

09-9 Experiment with Steady Red Stop Line Light

(Greenwood)

Status:

7-28-15: Here is some background and current status information on the “In-Roadway Warning Lights” (IRWLs).

8(09)-8(E)-Red In-Roadway Lights at LRT Grade Crossings-Los Angeles, CA (Reference# HOTO-1)

The Los Angeles County Metropolitan Transportation Authority (Metro), in cooperation with the City of Los Angeles and the County of Los Angeles, has received permission from the FHWA to conduct a demonstration of an In-Roadway Warning Light (IRWL) system that would supplement existing traffic signal indications at (10) intersections along the Metro Gold Line Eastside Extension and (2) intersections along the Metro Blue Line. This non-standard traffic control system, which is composed of a series of LED lights embedded in the roadway is designed to increase the awareness of the street running light rail trains among motorists approaching the intersection. The IRWLs are intended to supplement (not substitute) the circular red signal indications being shown to the cross-street traffic and the red left turn arrow signal indications being shown to the traffic in the left-turn lanes on the roadway that is parallel to and on both sides of the LRT tracks. The added lights enhance warning indications for motorists when trains approach the intersections, deterring them from making illegal left turns and increasing compliance with red traffic signal indications. The system uses red in-roadway lights that steadily illuminate when LRT traffic is approaching or occupying the crossing.

Installation of the IRWLs at the (12) grade crossings is now complete and the two-year monitoring period began on May 1, 2015. Progress reports will be submitted to the FHWA every 6 months and will include data collected at the trial and control locations. The approved Evaluation Plan analyzes traffic violations observed by photo enforcement and in-field observation. Collected data will be summarized and compared to data collected prior to the IRWL installation. A final report will be developed once the monitoring period is complete on April 30, 2017.

For more information, please contact Lia Yim, YimB@metro.net

09-21 Experiment with Separated/Protected Bikeway On the Left Side of

(Greenwood)

Two One-Way Streets in the City of Long Beach (Rte 9-112E)

Status: No Update at this time

10-3 Experiment with Second Train Warning Sign “Additional Train May Approach” with a Symbol Sign (Submitted by City of Riverside)

(Greenwood)

Items under Experimentation

Status: No Update at this time. See a report on the following website:
<http://www.dot.ca.gov/hq/traffops/engineering/ctcdc/reports/Final%20Report%20Additional%20Train%20May%20Approach%20Sign.pdf>

- | | | |
|-------|---|-------------|
| 11-3 | Experiment with Buffered Bicycle Lanes on 2 nd St.between Bayshore & PCH in Naples
Status: No Update at this time. | (Greenwood) |
| 11-12 | Experiment with Circular Rapid Flashing Beacon and RRFB
Status: No Update at this time. | (Greenwood) |
| 11-13 | Experiment with a Sign “RECKLESS DRIVING PROHIBITED”
Status: Experiment is on-going and has been extended to collect more data. | (Winter) |
| | <p>Arnel G. Dulay, P.E., T.E.
 Head, Traffic Investigations II Section
 Traffic and Lighting Division
 (626) 300-4748; Dulay, Arnel [ADULAY@dpw.lacounty.gov]</p> | |
| 11-19 | Experiment with 2 nd advance California Welcome Center Destination Sign
Status: No Update at this time. | (Tong) |
| 12-9 | Request to Experiment with Yellow LED Border on Pedestrian Signal
Status: (12-4-2014) Experiment has been completed. Pending review by FHWA and Signals Technical Committee (STC) before a final presentation is made to the CTCDC. | (Tong) |
| | <p>The complete report is posted on the following website:
 http://www.dot.ca.gov/hq/traffops/engineering/ctcdc/reports.htm</p> <p>Rob Stinger, P.E.
 Chief - Traffic Engineering & Operations
 Caltrans District 2
 530-225-3229</p> | |
| 12-18 | Request to experiment with Red Colored Transit-only Lanes (SF)
Status: (1-8-15) | (Patterson) |
| 12-19 | Request to Experiment with Highlighted Shared Lane Markings (LA City)
Status: No new update. | (Bahadori) |
| 12-21 | Request to Experiment with In-Roadway Warning Lights (IRWL) System that would supplement existing traffic signals along the Metro Gold Line (LA Metro) (Winter)
Status: No new update. | |
| 12-25 | Request for permission to experiment with various Bicycle Treatments (Santa Monica)
Status: No new update. | (Winter) |
| 13-01 | Request to Experiment with Green & Shared Roadway Bicycle Markings – Proposed by the City of Oakland
Status: No new update | (Patterson) |

Items under Experimentation

Jason Patton, PhD**Bicycle & Pedestrian Program Manager**

Transportation Planning & Funding Division

Department of Engineering & Construction

City of Oakland | Public Works Agency | APWA Accredited Agency

250 Frank H. Ogawa Plaza, Suite 4344 | Oakland, CA 94612

(510) 238-7049 | (510) 238-7415 Faxjpatton@oaklandnet.com

- 13-02 Request to Experiment with Bike Boxes and Wide Bike Strip Stripe (Patterson)
-Proposed by the City of Davis
[Status: \(12/1/2014\) City of Davis installed experimental bike boxes in September 2014.](#)
[Experimentation is ongoing.](#)

6. Public Hearing**Item 15-15 Proposal for striping a space for bicycle use at locations with right-turn-only lanes****Recommendation:**

Request to make a recommendation to include the figures and text in the CA MUTCD as proposed.

Agency Making Request/Sponsor: Caltrans/ Duper Tong, voting member

Background:

Per the Highway Design Manual, Section 403.6 (see next page), locations with right-turn-only lanes should provide a minimum 4-foot width for bicycle use between the right-turn and through lane when bikes are permitted. The Caltrans Division of Design has suggested that striping guidance be provided in the CA-MUTCD to reflect the advisory standard mentioned above.

HIGHWAY DESIGN MANUAL

400-9

July 1, 2015

challenges with visibility between turning vehicles and pedestrians. Multiple right-turn-only lanes should not be free right-turns when there is a pedestrian crossing. If there is a pedestrian crossing on the receiving leg of multiple right-turn-only lanes, the intersection should be controlled by a pedestrian signal head, or geometrically designed such that pedestrians cross only one turning lane at a time.

Locations with right-turn-only lanes should provide a minimum 4-foot width for bicycle use between the right-turn and through lane when bikes are permitted. Configurations that create a weaving area without defined lanes should not be used.

For signing and delineation of bicycle lanes at intersections, consult District Traffic Operations.

Figure 403.6B depicts an intersection with a left-turn-only bicycle lane, which should be considered when bicycle left-turns are common. A left-turn-only bicycle lane may be considered at any intersection and should always be considered as a tool to provide mobility for bicyclists. Signing and delineation options for bicycle left-turn-only lanes are shown in California MUTCD.

- (2) *Design of Intersections at Interchanges.* The design of at-grade intersections at interchanges should be accomplished in a manner that will minimize confusion of motorists, bicyclists, and pedestrians. Higher speed, uncontrolled entries and exits from freeway ramps should not be used at the intersection of the ramps with the local road. The smallest curb return radius should be used that accommodates the design vehicle. Intersections with interior angles close to 90 degrees reduce speeds at conflict points between motorists, bicyclists, and pedestrians. The intersection skew guidance in Index 403.3 applies to all ramp termini at the local road.

403.7 Refuge Areas

Traffic islands should be used to provide refuge areas for bicyclists and pedestrians. See Index 405.4 for further guidance.

403.8 Prohibited Turns

Traffic islands may be used to direct bicycle and motorized vehicle traffic streams in desired directions and prevent undesirable movements. Care should be taken so that islands used for this purpose accommodate convenient and safe pedestrian and bicycle crossings, drainage, and striping options. See Topic 303.

403.9 Effective Signal Control

At intersections with complex turning movements, channelization is required for effective signal control. Channelization permits the sorting of approaching bicycles and motorized vehicles which may move through the intersection during separate signal phases. Pedestrians may also have their own signal phase. This requirement is of particular importance when traffic-actuated signal controls are employed.

The California MUTCD has warrants for the placement of signals to control vehicular, bicycle and pedestrian traffic. Pedestrian activated devices, signals or beacons are not required, but must be evaluated where directional, multilane, pedestrian crossings occur. These locations may include:

- Mid-block street crossings;
- Channelized turn lanes;
- Ramp entries and exits; and
- Roundabouts.

The evaluation, selection, programming and use of a chosen device should be done with guidance from District Traffic Operations.

403.10 Installation of Traffic Control Devices

Channelization may provide locations for the installation of essential traffic control devices, such as "STOP" and directional signs. See Index 405.4 for information about the design of traffic islands.

403.11 Summary

- Give preference to the major move(s).
- Reduce areas of conflict.
- Reduce the duration of conflicts.

Proposal:

Add the following section in the CA MUTCD, Chapter 9C:

New Section:**Section 9C.102 Space for bicycle use at locations with right-turn-only lanes***Guidance:*

01 State highway locations with right-turn-only lanes where Class II bicycle facilities do not exist on the approach, but bicycles are permitted, a minimum 4-foot wide space for bicycle use should be provided between the right-turn and through lane. Where motor vehicle approach speeds are 40 miles per hour or greater, the minimum width for this bicycle use space should be 6 feet or greater.

Support:

02 Refer to Caltrans' Highway Design Manual, Section 403.6.

Option:

03 Local agencies may use this configuration on their roadways if deemed appropriate by the engineer.

Standard:

04 If used, the space for bicycle use shall be delineated by Detail 38 on the right of the through lane and Detail 38A on the left of the right-turn-only lane.

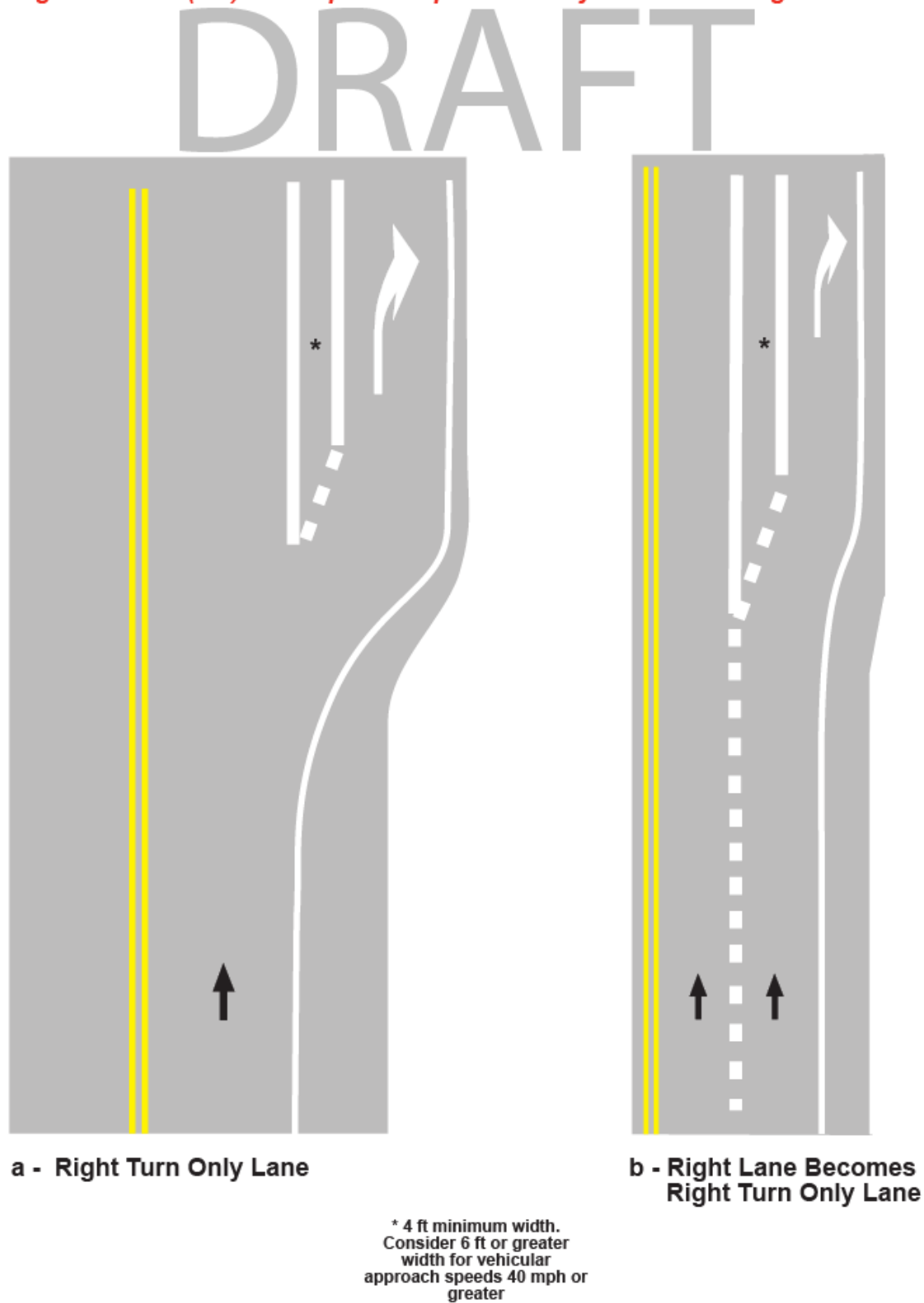
Option:

05 In order to prevent a wider space from appearing as a lane, an optional 8-inch wide skip stripe may be utilized at the beginning of the space to guide motorists into the right turn lane.

Support:

06 Refer to Figure 9C-107(CA) for details on striping.

Figure 9C-107 (CA). Examples of Space for Bicycle Use with Right Turn Lanes



LEGEND



Direction of Travel

NOT TO SCALE

Item 15-15 Proposal for striping a space for bicycle use at locations with right-turn-only lanes

Sample Location in Diamond Springs, CA



Series of photos showing a sample striping configuration



Item 15-15 Proposal for striping a space for bicycle use at locations with right-turn-only lanes

Item 15-16 Proposal to re-insert 3 sec minimum yellow change interval for protected left or right turns**Recommendation:**

Request to make a recommendation to re-insert text on minimum yellow change interval in the CA MUTCD.

Agency Making Request/Sponsor: Caltrans/ Duper Tong, voting member

Background:

With the adoption of the 2014 CA MUTCD, the 3-second minimum requirement for yellow change interval for protected right or left-turn pockets was deleted. Concerns have been raised that without this requirement, the CA MUTCD does not address minimum timing for protected left or right turns.

Caltrans Signal Controllers do not accept values less than 3 seconds for the yellow change interval.

From the 2012 CA MUTCD:**Section 4D.26 Yellow Change and Red Clearance Intervals***Guidance:*

¹⁴ A yellow change interval should have a minimum duration of 3 seconds and a maximum duration of 6 seconds. The longer intervals should be reserved for use on approaches with higher speeds. [Refer to Table 4D-102\(CA\).](#)

Support:

^{14a} The purpose of the yellow signal indication is to warn traffic approaching a traffic signal that the related green movement is ending or that a steady red indication will be exhibited immediately thereafter and traffic will be required to stop when the red signal is exhibited.

Standard:

^{14b} The minimum yellow change interval shall be in accordance with Table 4D-102(CA). The posted speed limit, or the prima facie speed limit established by the California Vehicle Code (CVC) shall be used for determination of the minimum yellow change interval for the through traffic movement.

^{14c} The minimum yellow change interval for a protected left-turn or protected right-turn phase shall be 3.0 seconds.

Option:

^{14d} The minimum yellow change interval for the through movement and the protected left-turn or protected right-turn may be increased based on a field review or by using appropriate judgment. That judgment may be based on numerous factors, including, but not limited to, 85th percentile speed, intersection geometry and field observation of traffic behavior.

¹⁵ Except when clearing a one-lane, two-way facility (see Section 4H.02) or when clearing an exceptionally wide intersection, a red clearance interval should have a duration not exceeding 6 seconds.

Support:

^{15a} When used, red clearance intervals normally range from 0.1 to 2.0 seconds.

Proposal:

From the 2014 CA MUTCD with proposed re-insertion of text (in red):

Guidance:

¹⁴ A yellow change interval should have a minimum duration of 3 seconds and a maximum duration of 6 seconds. The longer intervals should be reserved for use on approaches with higher speeds. Refer to Table 4D-102(CA).

Support:

^{14a} The purpose of the yellow signal indication is to warn traffic approaching a traffic signal that the related green movement is ending or that a steady red indication will be exhibited immediately thereafter and traffic will be required to stop when the red signal is exhibited.

Standard:

^{14b} The minimum yellow change interval for through traffic movement shall be determined by using the 85th percentile speed of free-flow traffic rounded up to the next 5 mph increment. Where the posted or prima facie speed limit is higher than the rounded value, use the posted or prima facie speed limit for determination of the minimum yellow change interval for the through traffic movement. See Table 4D-102(CA) sub-heading “a”.

^{14c} If the 85th percentile speed data is not available, the minimum yellow change interval for through traffic movements shall be determined by adding 7 miles per hour to the posted or prima facie speed limits of 30 mph or higher, and by adding 10 miles per hour to the posted or prima facie speed limits of 25 mph or less. See Table 4D-102(CA) sub-heading “b”.

^{14d} **The minimum yellow change interval for a protected left-turn or protected right-turn phase shall be 3.0 seconds.**

Guidance:

^{14d} Practitioners should exercise engineering judgment for determination of the minimum yellow change interval. Judgment should be based on numerous factors including, but not limited to, field observation of traffic behavior, intersection geometrics, downhill grade, perception-reaction time of drivers in the area, and actually driving the protected left-turn or protected right-turn movements to assess the need for longer yellow change intervals. Particular attention should be paid where setting minimum yellow change interval timing when exclusive turn lane exceeds 150 feet in length excluding the transition.

Option:

^{14e} The minimum yellow change interval for the through movement and the protected left-turn or protected right-turn may be increased based on appropriate engineering judgment.

Guidance:

¹⁵ Except when clearing a one-lane, two-way facility (see Section 4H.02) or when clearing an exceptionally wide intersection, a red clearance interval should have a duration not exceeding 6 seconds.

Support:

^{15a} When used, red clearance intervals normally range from 0.1 to 2.0 seconds.

Item 15-17 Information on definition of intersections and unmarked crosswalks**Recommendation:**

Provide an opinion on the definition of an intersection and unmarked crosswalks

Agency Making Request/Sponsor: Caltrans/ Duper Tong, voting member

Background:

Reviewing some definitions in the California Vehicle Code (CVC), we get the following:

Intersection:***Intersection***

365. An “intersection” is the area embraced within the prolongations of the lateral curb lines, or, if none, then the lateral boundary lines of the roadways, of two highways which join one another at approximately right angles or the area within which vehicles traveling upon different highways joining at any other angle may come in conflict.

Highway

360. “Highway” is a way or place of whatever nature, publicly maintained and open to the use of the public for purposes of vehicular travel. Highway includes street.

With that, if you were to have a divided roadway where the median island, whether painted or raised, extends through an intersection, the median would divide the roadway and create an intersection on one side of the roadway, as depicted in the illustration on page 13. The lane in the East to West direction of travel in the depiction below would not be part of the intersection where the median crosses the intersection.

Unmarked Crosswalk:***Crosswalk***

275. “Crosswalk” is either:

(a) That portion of a roadway included within the prolongation or connection of the boundary lines of sidewalks at intersection where the intersecting roadways meet at approximately right angles, except the prolongation of such

lines from an alley across a street.

(b) Any portion of a roadway distinctly indicated for pedestrian crossing by lines or other markings on the surface.

Roadway

530. A “roadway” is that portion of a highway improved, designed, or ordinarily used for vehicular travel.

Pedestrian

467. (a) A “pedestrian” is a person who is afoot or who is using any of the following:

(1) A means of conveyance propelled by human power other than a bicycle.

(2) An electric personal assistive mobility device.

(b) “Pedestrian” includes a person who is operating a selfpropelled wheelchair, motorized tricycle, or motorized quadricycle and, by reason of physical disability, is otherwise unable to move about as a pedestrian, as specified in subdivision (a).

As such, using the lower part of the illustration on page 13, if a barrier, such as a planter strip, grass, or other vegetation separates a sidewalk from the curb, and the perpendicular sidewalk terminates at this barrier, an unmarked crosswalk does not exist in the direction across the east-west roadway on the easterly side of the intersection.

Divided Highways and Unmarked Crosswalks

Intersection

365. An "intersection" is the area embraced within the prolongations of the lateral curb lines, or, if none, then the lateral boundary lines of the roadways, of two highways which join one another at approximately right angles or the area within which vehicles traveling upon different highways joining at any other angle may come in conflict.

Highway

360. "Highway" is a way or place of whatever nature, publicly maintained and open to the use of the public for purposes of vehicular travel. Highway includes street.

Sidewalk

555. "Sidewalk" is that portion of a highway, other than the roadway, set apart by curbs, barriers, markings or other delineation for pedestrian travel.

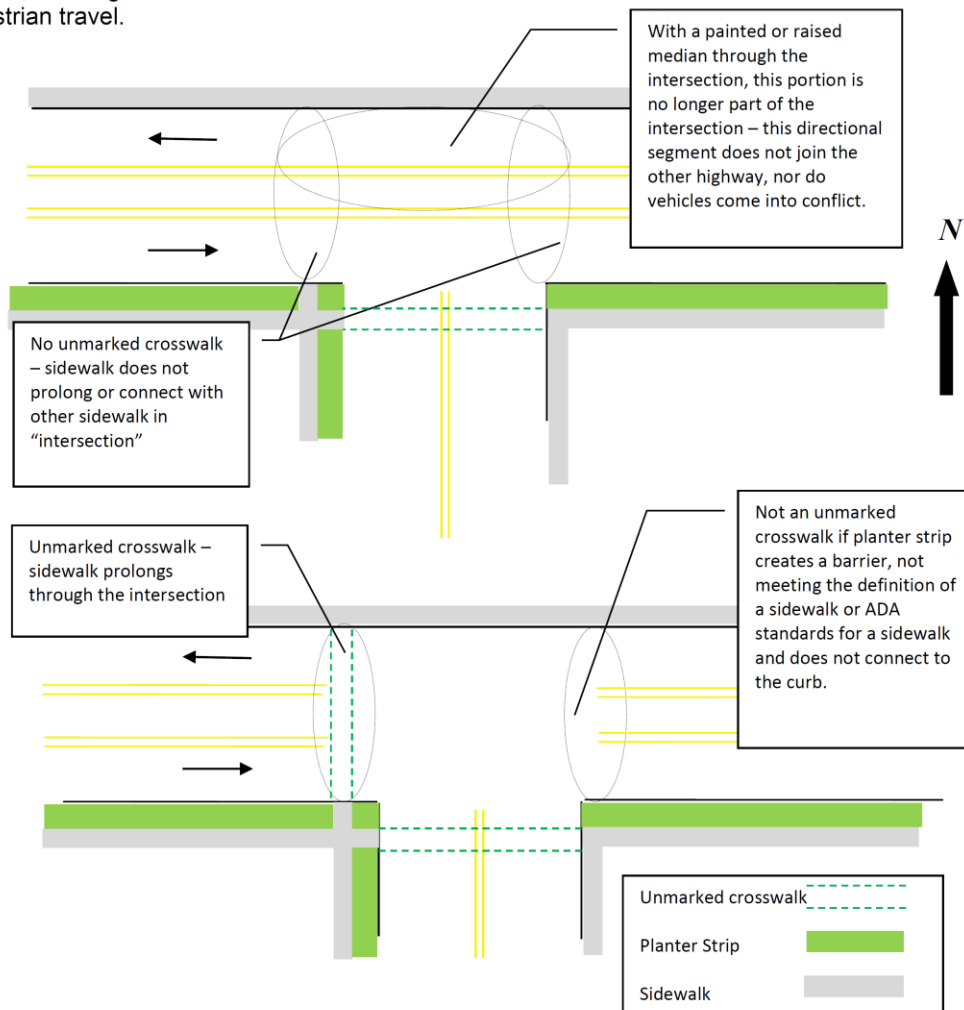
Crosswalk

275. "Crosswalk" is either:

- (a) That portion of a roadway included within the prolongation or connection of the boundary lines of sidewalks at intersection where the intersecting roadways meet at approximately right angles, except the prolongation of such lines from an alley across a street.
- (b) Any portion of a roadway distinctly indicated for pedestrian crossing by lines or other markings on the surface.

Roadway

530. A "roadway" is that portion of a highway improved, designed, or ordinarily used for vehicular travel.



Item 15-18 Proposal for street names for bridges over paths and at path intersections

Recommendation: Request the committee to recommend to include in the CA MUTCD street names at intersections with shared-use paths and at overpass and bridges when a bike path crosses under the overpass and bridge as outlined below.

Agency Making Request/Sponsor: Bryan Jones, non-motorized voting member

Background

Chapter 2 (Section 2D.43) of the California MUTCD requires (Should, V. Talada) Street Name (D3-1), D3-1a or G7-1(CA) signs at all urban area street intersections. Shared use (bike) paths are not specifically mentioned in this section, so it is not completely certain whether this street name signage mandate for “all street intersections” applies to street intersections with bike paths. If the mandate does apply, it is not covered further in Part 9 of the California MUTCD, which deals with bicycle facilities.

California MUTCD Part 9, Traffic Control for Bicycle Facilities, (Section 9B.20) mentions Street Name signs. However, there is only a single mention and that mention is in a list of other guide signs that may be used to provide direction, destination and destination information for bicycle travel.

A D3-1 Street Name sign is illustrated, along with other guide signs, in Figure 9B-4. However, Street Name signs are not included, even as an option, in either of the Part 9 illustrations of intersections, Figure 9B-5 (intersection of shared use path and roadway) or Figure 9B-7 (shared use path crossing).

The AASHTO Guide for the Development of Bicycle Facilities, 4th Edition (2012), Figures 5-17 through 5-20 does include D3-1 Street Name signs as options at mid-block path/roadway intersections.

Street Name signs at intersections are a standard, commonsensical way to guide motorists and other road users. They are also needed to guide bicyclists at shared use (bike) path intersections with streets and other paths. Street Name signs at intersections that name both streets and paths would help bicyclists with way finding, reduce their confusion and anxiety about way finding, and help prevent out-of-direction travel that may occur when intersections are not signed. As a matter of equity and uniformity, Street Name signs should be the standard all intersections, including street/ path and path/ path intersections. Being lost or taking a wrong turn has more taxing physical consequences when human powered transportation is employed rather than vehicular transportation.

Intersection signs would also help identify that a bike path exists, both to cyclists and passing motorists (who are potential cyclists.) Unsigned paths can either be overlooked or simply seem too enigmatic to use. Intersection signs are a form of promotion and even, perhaps, a reinforcement of warning signs that may be installed near a path. Ultimately, the need and desire is to make cycling navigation easier and bike paths a more prominent part of the transportation system. This will help achieve Caltrans’ goal to triple the number of bicycle trips by 2020.

Item 15-18 Proposal for street names for bridges over paths and at path intersections

Unsigned structures carrying roadways above bicycle paths are anonymous, but with signs installed, they can become useful in orienting bike path users. Whether or not the bike path has a direct connection to the roadway, knowledge of what the roadway is helps with way finding and reduces confusion on the part of path users.

While a common criticism of signs is that they can create clutter or don't fit in with a natural setting, these objections don't apply to signs on overcrossings or bridges. The signs are insignificant compared to the mass and scale of the structures themselves. The signs not only add useful information, they may even make the structures a bit less forbidding and more attractive.

Other jurisdictions (Phoenix is an example) have such signs on overpasses and bridges.

Benefits

Making Street Name signs mandatory at bicycle path intersections with streets and other paths will:

- Reduce ambiguity in California MUTCD Part 2 guidance.
- Improve way finding for bicyclists and other path users.
- Standardize intersection signage and treat path intersection equitably with street intersections
- Promote bicycling and physical activity by identifying path locations and names to bicyclists and motorists.
- Help Caltrans reach its goal of tripling trips by bicycle.



Proposal

Proposed text changes are provided in red.

Section 2D.43 Street Name Signs (D3-1 or D3-1a)**Standard:**

01 Street Name (D3-1 or D3-1a or G7-1(CA)) signs shall be installed in urban and rural areas at all street/ shared use path intersections and at all shared use path/ shared use path intersections.

Guidance:

01 a Street Name (D3-1 or D3-1a or G7-1(CA)) signs (see Figure 2D-10 and 2D-10(CA)) should be installed in urban areas at all street intersections regardless of other route signs that might be present and should be installed in rural areas to identify important roads that are not otherwise signed.

Option:

02 For streets that are part of a U.S., State, or county numbered route, a D3-1a Street Name sign (see Figure 2D-10) that incorporates a route shield may be used to assist road users who might not otherwise be able to associate the name of the street with the route number.

Standard:

03 The lettering for names of streets and highways on Street Name signs shall be composed of a combination of lower-case letters with initial upper-case letters (see Section 2A.13).

Section 9B.20 Bicycle Guide Signs (D1-1b, D1-1c, D1-2b, D1-2c, D1-3b, D1-3c, D3-1, D3-1a and G7-1(CA), D11-1, D11-1c)

04 Destination (D1-1, D1-1a) signs, ~~Street Name (D3)~~ signs, or Bicycle Destination (D1-1b, D1-1c, D1-2b, D1- 2c, D1-3b, D1-3c) signs (see Figure 9B-4) may be installed to provide direction, destination, and distance information as needed for bicycle travel. If several destinations are to be shown at a single location, they may be placed on a single sign with an arrow (and the distance, if desired) for each name. If more than one destination lies in the same direction, a single arrow may be used for the destinations.

Standard:

04a Street Name (D3-1 or D3-1a or G7-1(CA)) signs shall be installed at urban and rural areas at all streets and shared-use path intersections and at all intersections between two or more shared-use paths. See Section 2D.43

New proposed Section in Part 9:

Section 9B.104 (CA) Guide Signs on Overpass' and Bridges**Standard:**

01 Street Name (D3-1 or D3-1a or G7-1(CA)) signs shall be installed in urban and rural areas on overpasses and bridges where a bike path crosses under the overpass or bridge.

Support:

02 The size of Street Name signs on overcrossings and bridges should be commensurate with their distance from the bike path. (I don't think we need this support statement as there are standards for sign visibility in section 2A.07, V.Talada)

Item 15-19 Information on use of red markers on off-ramps.**Recommendation:**

This item is for information only – no vote requested.

Agency Making Request/Sponsor: Caltrans/ Duper Tong, voting member

Background:

A series of wrong-way driver crashes has been occurring on California freeways in the past several months. Caltrans will soon evaluate wrong-way movement detection and warning equipment on a select number of freeway exit ramps and if successful, these systems will warn wrong-way drivers on an exit ramp. As part of this evaluation, there are plans to supplement pavement markings on off-ramps with raised red, reflective markers, facing a wrong-way driver on an exit ramp. These efforts, along with wrong-way movement detection and warning equipment, may help reduce these type of events. Movement detection before and after installation data may show the effectiveness of these systems.

The development of additional figures and text in the CA MUTCD may be needed in order to have uniformity. Currently, the CA MUTCD permits use of red markers for wrong-way delineation. Care should be taken with spacing for right edgeline delineation with reflective markers that the markings do not appear as lane lines. The development of a red/blank reflective marker may be desired, as only red/yellow and red/clear markers exist in current manuals.

Section 3F.03 Delineator Application

Option:

~~09 Red delineators may be used on the reverse side of any delineator where it would be viewed by a road user traveling in the wrong direction on that particular ramp or roadway.~~ In California, except at truck escape ramps, red markers are used for wrong-way traffic, not delineators.



Item 15-19 Information on use of red markers on off-ramps.

Item 15-20 Proposal to modify Section 2B.55 Photo Enforced Signs and Plaques**Recommendation:**

Request the committee to vote to recommend to modify text in the CA MUTCD shown below in the CA-MUTCD in order to match the current California Vehicle Code, 21455.5

Agency Making Request/Sponsor: Caltrans/ Duper Tong, voting member

Background:

Since 2013 the CVC requires identifying photo enforcement systems within 200 feet of an intersection where it is being utilized. No longer do agencies have the option of posting signs at jurisdictional boundaries, as was allowed in a previous version of this code.

2015 CVC 21455.5

(a) The limit line, the intersection, or a place designated in Section 21455, where a driver is required to stop, may be equipped with an automated traffic enforcement system if the governmental agency utilizing the system meets all of the following requirements:

(1) Identifies the system by signs posted within 200 feet of an intersection where a system is operating that clearly indicate the system's presence and are visible to traffic approaching from all directions in which the automated traffic enforcement system is being utilized to issue citations. A governmental agency utilizing such a system does not need to post signs visible to traffic approaching the intersection from directions not subject to the automated traffic enforcement system. Automated traffic enforcement systems installed as of January 1, 2013, shall be identified no later than January 1, 2014.

Proposal:

Revise Section 2B.55 as follows:

Section 2B.55 Photo Enforced Signs and Plaques (R10-18, R10-19P, R10-19aP)**Standard:**

~~00 Except as provided in Paragraph 1 below, A Traffic Signal PHOTO ENFORCED (SR56(CA)) sign shall be placed posted at traffic signals where an automated traffic enforcement system is used. within 200 feet of a traffic signal on the approaches where the automated traffic enforcement system is being utilized to issue citations. See Figure 2B-3(CA). Refer to CVC 21455.5.~~

Option:

~~01 A TRAFFIC LAWS PHOTO ENFORCED (R10-18) or Traffic Signal PHOTO ENFORCED (SR56(CA)) sign (see Figure 2B-3 2B-3(CA)) may be installed at a jurisdictional boundary, including all major entrances (at a minimum, freeways, bridges, and state highway routes) to advise road users that some of the traffic regulations within that jurisdiction are being enforced by photographic equipment.~~

01a The RED LIGHT VIOLATION \$ ____ FINE (SR58(CA)) sign (see Figure 2B-3(CA)) may be used in advance of signalized intersections where a local agency has adopted an ordinance setting a specific fine amount for red light violations within its jurisdiction. The SR58(CA) sign may be placed on State highways when requested by the local agency.

Item 15-21 Proposal to remove International Symbol of Accessibility (ISA) from Figure 3B-22(CA)**Recommendation:**

Request to make a recommendation to remove the ISA symbol in Figure 3B-22(CA) in the CA MUTCD.

Agency Making Request/Sponsor: Caltrans/ Duper Tong, voting member

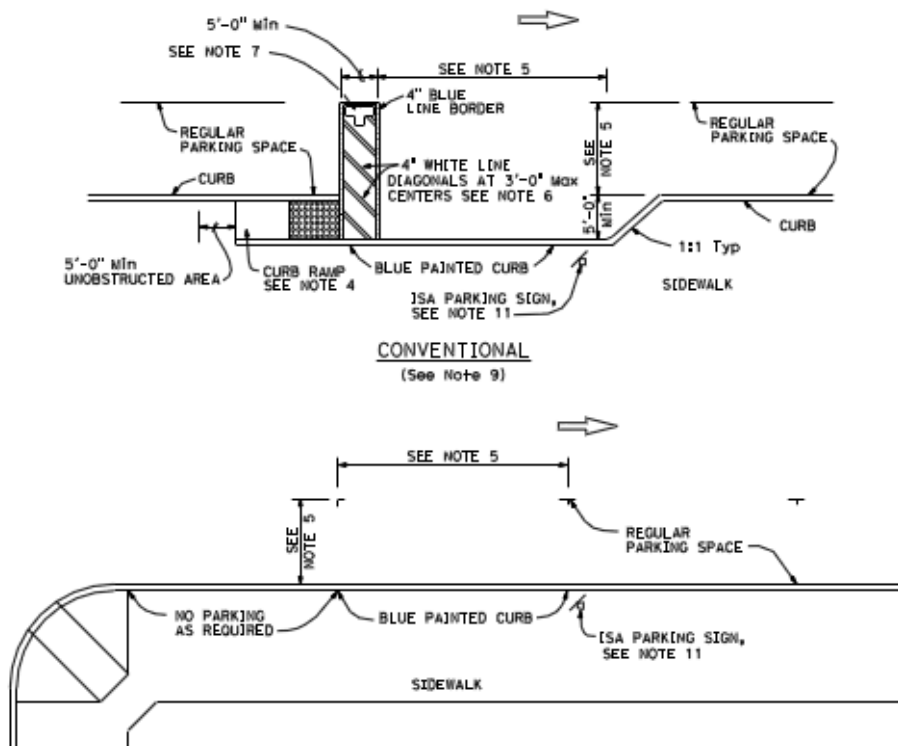
Background:

Caltrans deleted the ISA pavement marking in RSP A90B “Accessible Parking On-Street” dated July 3, 2015 to be in conformance with the California Building Code. RSP A90B has also been approved by FHWA. This is because there is no code requirement, State or Federal, for the placement of the ISA pavement marking for on street accessible parking. It is required for parking lots in the California Building Code section 11B-502.6.4.1, but not for on street accessible parking.

Proposal:

It is recommend that the CA MUTCD on-street accessible parking guidance have the same requirements as in RSP A90B.

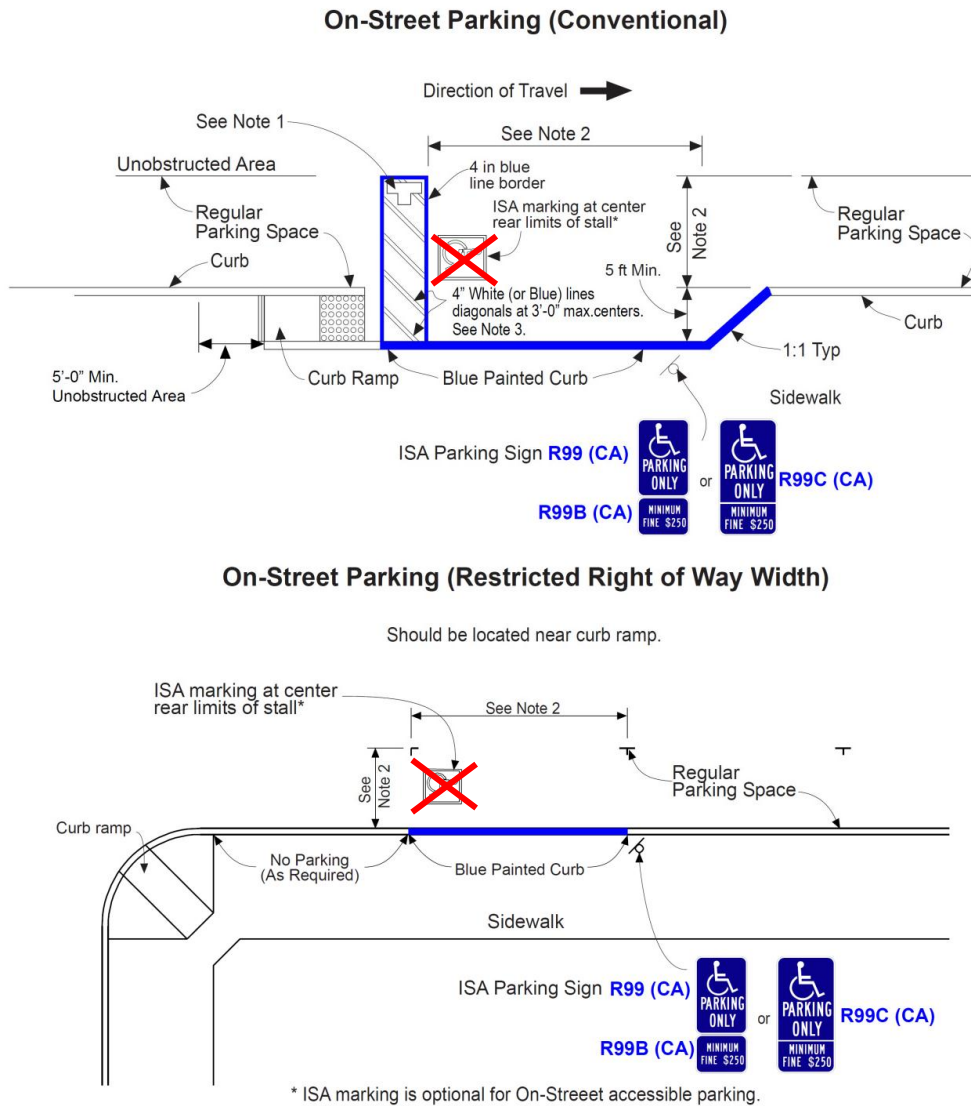
Removing the ISA symbol in Figure 3B-22 (CA) within the on-street parking depiction would eliminate any concerns on the symbol’s use with on-street parking. Caltrans Revised Standard Plan A90B.

**Item 15-21 Proposal to remove International Symbol of Accessibility (ISA) from Figure 3B-22(CA)**

California MUTCD 2014 Edition
(FHWA's MUTCD 2009 Edition, including Revisions 1 & 2, as amended for use in California)

Page 740

Figure 3B-22 (CA). Examples of Disabled Persons Parking Symbol, Legend and Related Markings (Sheet 2 of 2)



Proposal to delete text in CA MUTCD as follows:

Section 3B.20 Pavement Word, Symbol, and Arrow Markings

Guidance:

~~18a The ISA parking space marking (3B-22(CA)) should be placed in each on-street parking space designated for use by persons with disabilities.~~

Item 15-21 Proposal to remove International Symbol of Accessibility (ISA) from Figure 3B-22(CA)

12-10 Proposal to amend CA MUTCD Section 2D.37 Destination Signs (D1 Series) to allow the use of monument supplemental destination signs

Recommendations: Consider recommendation for approval to use guide signs for Veteran Memorial Monuments.

Requesting Agency/ Sponsor : City of Murrieta/Duper Tong, Caltrans, Voting Member

Background: In 2011, the City of Murrieta, California requested Caltrans to install guide signs for a Veteran Memorial Monument. The request to install signs by encroachment permits was denied, with the response that Caltrans “. . . will be proposing a change to the California MUTCD to address Veterans’ memorials and hope to have the change approved by January 2013.” This topic was presented to the Committee (Agenda item 12-10) in the May 24, 2012 CTCDC meeting in the form of changes in the CA MUTCD to permit Veteran Memorial Monuments to be directionally signed on highways. The request did not pass with sufficient number of votes.

In 2012, the Committee did not pass the addition of Veterans Memorial Monument sign by a vote of 6-4 (7 votes required to pass) (members Richard Shrader and Robert Bronkall abstained; members Hamid Bahadori and Mike Robinson voted no). Main concern raised by the Committee members was to have some criteria such as a minimum size of the monument, minimum number of visitors, ownership of property (public vs. private), and any other criteria that can be used to evaluate requests for signs. There are many smaller memorial sites throughout California that may ask for freeway signage, but with only generic criteria of "miles from the highway", it would be difficult to evaluate these requests if no other criteria were listed on the chart.

12-10 Proposal to amend CA MUTCD Section 2D.37 Destination Signs (D1 Series) to allow the use of monument supplemental destination signs



CITY OF MURRIETA

July 6, 2015

John Bulinski
Interim Director
Caltrans District 8
464 W. 4th Street
San Bernardino, CA 92401

Re: DIRECTIONAL SIGN FOR MURRIETA VETERANS MEMORIAL MONUMENT

Dear District Director:

As a way to honor those that have served in this nation's defense and who have sacrificed their lives in service of the United States, the City of Murrieta has constructed a contemporary Veteran's Memorial within the Murrieta Town Square Park. As three of the seven granite monuments have been built, we are requesting that the California Department of Transportation (Caltrans) place directional signage along both Interstate 15 and 215 directing visitors.

The purpose of the Veteran's Memorial Monument is to create and maintain a dignified veterans memorial reflecting contributions made by veterans from all branches of the military throughout the history of the United States, and to acknowledge and honor the courage, commitment, and heroism demonstrated by all veterans past and present. This monument is located at the Murrieta Town Square Park, within the courtyard of the City Hall, the Police Department, the Murrieta Public Library and the Senior Center. The convenient location provides easy access for residents and visitors with ample parking. In addition, this monument will provide a picturesque backdrop to regular events that currently take place at the Town Square Park, such as the Veterans Day Parade and Memorial Day festivities.

As many members of the Murrieta community are either active duty personnel or retired from one of the military branches, the Murrieta Veterans Memorial Monument is a significant attraction. For this reason, we hope Caltrans can support the City of Murrieta's request to place directional signage along the two interstates in Murrieta.

If you have any questions, please do not hesitate to contact Brian Ambrose, Administrative Manager, at (951) 461-6019 or bambrose@murrieta.org.

Sincerely,

Harry Ramos
Mayor

Cc: State Senator Jeff Stone
Assemblywoman Melissa Melendez



Below is information on a prior agenda item presented to the Committee in 2012. The outcome of the May 24th, 2012 CTCDC meeting is captured in verbatim minutes and the recommendation to approve did not pass with sufficient number of votes.

STATE OF CALIFORNIA—BUSINESS, TRANSPORTATION AND HOUSING AGENCY

EDMUND G. BROWN Jr., Governor

DEPARTMENT OF TRANSPORTATION

OFFICE OF THE DISTRICT DIRECTOR

464 WEST FOURTH STREET, MS 1201

SAN BERNARDINO, CA 92401-1400

MAIN (909) 383-4561

DIRECT (909) 383-4055

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*Flex your power!
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September 14, 2011

Patrick A. Thomas
Director Public Works/ City Engineer
City of Murrieta
One Town Square
Murrieta, CA 92562

Dear Mr. Thomas:

This is in response to your Appeal regarding the denial of the City of Murrieta's (City) encroachment permit application # 08-11-N-MC-0423, dated August 30, 2011 to install Veterans Memorial Signs on Interstate 15 at California Oak Road in the City of Murrieta.

The California Department of Transportation (Department) recognizes the importance of providing signage to Veterans Memorials. However, the proposed sign is not approved by California Manual of Traffic Control Devices (CAMUTCD). As you are aware, the Department has to comply with the requirements of CAMUTCD for all signs installed on the State Highway System. Any new sign has to be approved by California Traffic Control Device Committee (CTCDC) before it can be added to the CAMUTCD.

To assist the City with this request, the Department will develop the specifications for this sign and serve as the lead agency to get CTCDC approval. The Department will request the approval of this sign be added to the agenda for the first CTCDC meeting in 2012. We expect that the CTCDC will approve the sign at their meeting. As soon as the sign is approved by the CTCDC, the Department will be able to issue an encroachment permit to the City to install the sign.

Thank you for taking the time to write to me. If you have any questions or need additional information, please contact me at (909) 383-4055 or Syed Raza, Deputy District Director, Traffic Operations at (909) 383-5979.

Sincerely,

RAYMOND W. WOLFE, PhD
District 8 Director

**CITY OF MURRIETA**

August 30, 2011

Dr. Raymond Wolfe, Director
State of California, Department of Transportation
District 8
464 W. Fourth Street
San Bernardino, CA 92401

Subject: Appeal of Denied Encroachment Permit No. 08-11-N-MC-0423/08-RIV-15-9.5/11.6

Dear Ray:

This letter is to appeal the denial of an encroachment permit to install guide signs for the City of Murrieta Veterans Memorial (see attached letter). Although we understand the permit was denied due to not meeting the placement requirements in the 2010 CA MUTCD, we believe this type of sign has been used for other veterans or war memorials in California. As an example, I noticed a Korean War Memorial guide sign on Interstate 5 near Gustine, CA. I realize this is not within your District, but believe there is precedent within the state and enough flexibility in the CA MUTCD to allow guide signs for the Murrieta Veterans Memorial as proposed (see attached plan submitted with the encroachment permit application). The Veterans Memorial in Murrieta includes walls depicting scenes for each of the wars fought throughout the country's history. It is anticipated that many visitors will be coming from outside this area to see the Veterans Memorial and freeway guide signs will provide a benefit to the traveling public.

We would like to request an expedited review of this appeal. The City is planning to dedicate the Korean War wall as part of our Veterans Memorial on November 11 (Veterans Day) this year and if the appeal is upheld, we would like to install the signs before this date. If you have any questions or would like to discuss this matter further, please call me at your convenience.

Sincerely,

Patrick Thomas,
Director of Public Works/City Engineer

cc: Jim Holston, Assistant City Manager
Brian Stephenson, Contract Traffic Engineer

12-10 Proposal to amend CA MUTCD Section 2D.37 Destination Signs (D1 Series) to allow the use of monument supplemental destination signs

Recommendations: Caltrans request that the Section 2D.37 be amended as shown in red under the proposal to allow the use of monument supplemental destination signs from the State Highways/Freeways.

Requesting Agency & Sponsor: Caltrans

Background: The City of Murrieta, California requested an encroachment permit during the summer of 2011 (see response letter dated August 25, 2011, from Richard Goh, District 8 Encroachment Permit Engineer, Riverside County). The request to install signs by encroachment permits was denied, with the response that Caltrans “. . . will be proposing a change to the California MUTCD to address Veterans’ memorials and hope to have the change approved by January 2013.” This information item initiates the process to begin the dialogue to discuss pros and cons of updating Caltrans’ policy to include Veterans Memorials (or Monuments) by State of California sign policy.

Action item: If Caltrans were to add a new line to Table 2D-102(CA) Supplemental Destination Guide Signs, for “Monuments” and include the AASHTO, Table II criteria, it includes:

Type of Destination	Specific Criteria	Major Metropolitan Areas	Urbanized Areas	Rural Areas
Monuments*	Maximum Miles from State Highway (or Freeway Interchange)	5	5	5

*criteria for maximum miles from State Highway for National Cemeteries in Table 2D-102(CA) is: 1, 3, and 5 miles for Major Metropolitan, Urbanized, and Rural areas (respectively)

Pros:	Cons:
<ul style="list-style-type: none"> Veterans Groups, and other sponsors of monuments, in general, may request supplemental destination signs, and have a sign policy to pursue optional, supplemental signs to monuments of deep local, regional, statewide, or national significance. 	<ul style="list-style-type: none"> Current sign policy limits a supplemental destination guide sign to traffic generators, and “Monuments” is too limited a scope of whether it is or is not a significant traffic generator.
	<ul style="list-style-type: none"> Caltrans will place supplemental destination guide signs for memorial bridges or segments of State highways, only when placed at the request of the Legislature.

Proposal to include limiting criterion to “Monuments” to require that a city or county by resolution of city council or county commission request for a community that supplemental destination signs be requested for placement on State highways, freeways or expressways, and that funds be made available

12-10 Proposal to amend CA MUTCD Section 2D.37 Destination Signs (D1 Series) to allow the use of monument supplemental destination signs

for these signs, for the limits of the existence of these signs, from nonstate sources:

Proposal: (Amendment shown in red color)

Caltrans recognizes that Table 2D-102 (CA), in the CA MUTCD 2012, has no current line item for Supplemental Destination Guide signs for “Veterans Memorial” destinations. Caltrans sponsors this information item to the CA Traffic Control Devices Committee, to consult with cities and counties, as an action item, to establish a rational criterion upon which to include “Veterans Memorials” or for specific war(s) “Veterans of _____ War(s) Memorial” in the CA MUTCD Table 2D-102(CA) Supplemental Destination Guide Signs.

Current Policy (general, for all Streets and Highways):

Section 2D.37 Destination Signs (D1 Series)

Standard:

¹⁹ Criteria for supplemental destination signs shall be as shown in Table 2D-102(CA).

²⁰ Signs shall not be provided for privately owned, profit making enterprises regardless of their size.

(For freeways and expressways):

Section 2E.35 Other Supplemental Guide Signs

Support:

⁰¹ Supplemental Guide signs can be used to provide information regarding destinations accessible from an interchange, other than places displayed on the standard interchange signing. However, such Supplemental Guide signing can reduce the effectiveness of other more important guide signing because of the possibility of overloading the road user’s capacity to receive visual messages and make appropriate decisions. “The AASHTO Guidelines for the Selection of Supplemental Guide Signs for Traffic Generators Adjacent to Freeways” is incorporated by reference in this Section (see Page i for AASHTO’s address).

Guidance:

⁰² No more than one Supplemental Guide sign should be used on each interchange approach.

⁰³ A Supplemental Guide sign (see Figure 2E-24) should not list more than two destinations. Destination names should be followed by the interchange number (and suffix), or if interchanges are not numbered, by the legend NEXT RIGHT or SECOND RIGHT or both, as appropriate. The Supplemental Guide sign should be installed as an independent guide sign assembly.

⁰⁴ Where two or more Advance Guide signs are used, the Supplemental Guide sign should be installed approximately midway between two of the Advance Guide signs. If only one Advance Guide sign is used, the Supplemental Guide sign should follow it by at least 800 feet. If the interchanges are numbered, the interchange number should be used for the action message.

⁰⁵ States and other agencies should adopt an appropriate policy for installing supplemental signs using “The AASHTO Guidelines for the Selection of Supplemental Guide Signs for Traffic Generators Adjacent to Freeways.” In developing policies for such signing, such items as population, amount of traffic generated, distance from the route, and the significance of the destination should be taken into account.

Support:

¹² Section 2D.37 also applies to freeways and expressways.

At 6,000-plus California freeway interchange off ramps on the California Freeway system, if the guideline of no more than one Supplemental Guide sign should be used on each interchange approach, is strictly followed, eligibility to place “plus-one” signs in addition to existing guide signs, statewide, would be very limited. Section 2D.37 Destination Signs, and Table 2D-102(CA) are where Caltrans has established its policy for installing supplemental guide signs using “The AASHTO Guideline for

12-10 Proposal to amend CA MUTCD Section 2D.37 Destination Signs (D1 Series) to allow the use of monument supplemental destination signs

the Selection of Supplemental Guide Signs for Traffic Generators Adjacent to Freeways.” Table 2D-102(CA) (formerly referred to as Table 2D-104(CA) in prior editions of the CA MUTCD) reflects the data in the AASHTO Guideline, amended for use in California. AASHTO does not specifically mention “Veterans Memorials” in its guidelines, but does refer to “Monuments.” There is no specific visitor criteria in AASHTO guidelines for “Monuments.”

Standard:

¹⁹ Criteria for supplemental destination signs shall be as shown in Table 2D-102(CA).

^{19A} For a monument to be signed from a State highway, its location shall be within 5 miles of the highway. Only one sign, for each direction shall be allowed and it will be from the nearest State highway. The type of sign, whether it is a supplemental plaque under an existing Supplemental Destination (G86(CA) Series) sign or a standalone sign shall be determined by the Department of Transportation. Any follow-up directional signs on local roadways, if needed, shall be in place before the highway signs are installed.

^{19B} A requesting local agency shall be responsible for adopting a resolution requesting Department of Transportation approval to install monument supplemental destination signs, or to install signs by encroachment permit. The costs for signs, their installation, and ongoing maintenance and replacement shall be the responsibility of the requesting local agency for the installation and maintenance of these signs by nonstate sources. If after 7 to 10 years supplemental destination signs to monuments are not maintained or replaced by the requesting local agency, worn-out or faded signs not meeting criteria in Table 2A-3, will be removed from the State highway and will require renewal of the local resolution by the requesting local agency for reinstallation of supplemental signs to monuments.

²⁰ Signs shall not be provided for privately owned, profit making enterprises regardless of their size.

Proposal:

This agenda item is brought back to the Committee again for consideration.